# APPENDIX C

# PUBLIC COMMENTS AND DOE RESPONSE TO COMMENTS

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# APPENDIX C

This appendix provides the comments received during the public comment period and the U. S. Department of Energy's (DOE's) responses to them. Letters received are reproduced here. Comments received at the public meetings in Columbia and North Augusta, South Carolina are summarized. The transcripts from the public meetings can be reviewed at the DOE public reading rooms: DOE Freedom of Information Reading Room, Forrestal Building, Room 1E-190, 1000 Independence Avenue, S.W., Washington, D.C., 20585, phone: 202-586-6020, and DOE Public Document Room, University of South Carolina, Aiken Campus, University Library, 2nd Floor, 171 University Parkway, Aiken, SC 29801, Phone: 803-648-6815.

DOE published the *Savannah River Site Salt Processing Alternatives Draft Supplemental Environmental Impact Statement* (DOE/EIS-0082-S2D) in March 2001. DOE held public meetings on the Draft SEIS in North Augusta, South Carolina on May 1, 2001 and in Columbia, South Carolina on May 3, 2001. The 45-day public comment period ended on May 14, 2001.

Court reporters recorded comments and statements made during the four public meeting sessions. In those sessions, nine individuals provided comments or made statements. DOE also received 12 letters on the Draft SEIS by mail. This Appendix presents the comments received and the DOE responses to those comments. If a comment prompted a modification to the EIS, DOE has noted the change and directed the reader to that change.

Many, but not all, of the comments addressed the four issues described in the following paragraphs. In these paragraphs DOE describes issues that were pointed out by several commenters and provides a general response to the issue.

The National Academy of Sciences – National Research Council Committee on Radionuclide Separation Process for High-Level Waste at the Savannah River Site was given the opportunity to comment on this Final SEIS (FSEIS). The Committee chose not to comment on the FSEIS, but instead to comment on the separation alternatives in its report to DOE, which was submitted on June 4, 2001.

## No Action Alternative

Commenters questioned the description of the No Action alternative and its impacts. They generally expressed the opinion that the long-term impacts of No Action would be more severe than DOE portrayed qualitatively in the Draft SEIS and asked that the No Action alternative be modified and the long-term impacts analyzed quantitatively. Several commenters suggested that DOE evaluate a scenario that assumed no salt processing alternative could be developed, and evaluate the impacts of leaving salt waste in HLW tanks until the eventual failure of the tanks.

Response: DOE has revised the analysis of the No Action alternative to provide a more quantitative evaluation of the impacts of the No Action alternative over the long term. DOE has added text to the SEIS, and added data to appropriate tables, that compare the long-term impacts of the No Action alternative to the long-term impacts of the action alternatives. DOE evaluated the impacts of the eventual of tank contents to the environment under a tank overflow scenario, and the consequent health impacts to a person drinking the contaminated water from on-site streams and the Savannah River. DOE also addressed the radiation exposure that could result from external exposure to contaminated soil or by consumption of vegetation or animals fed by contaminated water.

## Direct Disposal in Grout Alternative

Several commenters questioned the implementation of the Direct Disposal in Grout alternative because in their view it would result in disposal of HLW at the Savannah River Site (SRS). Other commenters asked about DOE's discussions about the Direct Disposal in Grout alternative with the U.S. Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (SCDHEC).

Response: Any of the salt processing alternatives would require a determination that residues to be disposed of as low-level wastes are "waste incidental to reprocessing," not HLW. DOE describes the process for determining whether waste is waste incidental to reprocessing in Section 7.1 of the SEIS. The waste-incidental-to-reprocessing analysis would be applied to any salt processing alternative that DOE selected for implementation. If the waste met the criteria for waste incidental to reprocessing, it could be managed as low-level waste or as TRU waste, depending on the nature of the waste. DOE expects that the waste generated under the direct disposal in Grout alternative would be managed as low-level waste. DOE has had preliminary discussions with SCDHEC at the staff level. SCDHEC conveyed to DOE during those discussions that, as long as DOE followed the waste incidental to reprocessing determination process, SCDHEC found the Direct Disposal in Grout alternative to be acceptable in principle.

## Waste Management

Commenters asked how wastes that would be generated by the alternatives, particularly benzene and solvents, would be managed.

Response: Currently, incineration is considered the best available treatment technology for benzene and other organic liquid wastes. DOE expects that these wastes would be disposed of by incineration. DOE has not yet determined whether the Consolidated Incineration Facility, a portable vendor-operated facility, or a suitable offsite facility would be used for incineration of these wastes. DOE previously analyzed the impacts of incineration and various alternatives to incineration in the *Final Supplemental Environmental Impact Statement, Defense Waste Processing Facility* (DOE/EIS-0082-S, November 1994). The results of this analysis show that the impacts from the various alternatives to incineration are bounded by the impacts of incineration. The actual treatment facility would be determined during design and construction of the salt processing facility.

## Criteria for Selection of the Preferred Alternative

Several commenters asked about the criteria to be used by DOE to select the preferred salt processing technology, and several commenters were especially interested in cost as a criterion.

Response: In addition to reviewing the results of research and development work on the alternative technologies, DOE evaluated each alternative against the following criteria: cost, schedule, technical maturity, technology implementability, environmental impacts, facility interfaces (with existing SRS facilities), process simplicity, process flexibility, and safety. DOE has revised the SEIS (at Section 2.8.3) to incorporate the latest approximate range of costs through construction for each of the alternatives. DOE does not consider the cost estimates available at this time to be reliable enough to be a significant discriminating factor for decision-making. (The National Academy of Sciences final report on SRS salt processing alternatives did not propose criteria for selecting an approach and did not identify a preferred alternative.)

**Table C-1.** Public Comments on the Draft Salt Processing Alternatives Supplemental EIS

| Comment Source Number[a] | Commenter | Page Number |
|---|---|---|
| L1 | Mr. William Lawless | |
| L2 | South Carolina Budget and Control Board | |
| L3 | Mr. William Lawless | |
| L4 | Mr. William Willoughby | |
| L5 | U. S. Department of the Interior | |
| L6 | Mr. W. Lee Poe, Jr. | |
| L7 | Economic Development Partnership | |
| L8 | Savannah River Site Citizens Advisory Board | |
| L9 | Georgia Department of Natural Resources | |
| L10 | U. S. Environmental Protection Agency | |
| L11 | South Carolina Department of Health and Environmental Control | |
| L12 | Rutgers, The State University of New Jersey | |
| M1-01, M1-02 | Mr. James Hardeman | |
| M2 | No comments were submitted at this meeting session | |
| M3-01, M3-02 | Mr. William Willoughby | |
| M3-03 through M3-08 | Ms. Leslie Minerd | |
| M3-09 through M3-11 | Mr. Ernie Chaput | |
| M3-12 through M3-14 | Ms. Karen Hardison | |
| M3-15 through M3-17 | Dr. Mary Kelly | |
| M3-18, M3-19 | Ms. Leslie Minerd | |
| M3-20 | Ms. Melinda Holland | |
| M3-21 | Ms. Karen Hardison | |
| M4-01 through M4-03 | Ms. Paula Austin | |
| M4-05 through M4-08 | Mr. John Austin | |
| M4-09 through M4-11 | Ms. Paula Austin | |

[a] Unique codes were given to each of the letters received and public meeting sessions. L1 is the first letter received and M1 is the afternoon session at North Augusta S.C., M2 is the evening session at North Augusta, S.C., M3 is the afternoon session at Columbia, S.C., and M4 is the evening session at Columbia, S.C. Individual comment are coded L1-01 or M1-01, etc. The 12 letters received are provided in this appendix and complete transcripts of the meetings are available in the DOE Public Document Rooms.

# LETTERS

The comment letters DOE received on the Draft Salt Processing Alternatives Supplemental EIS and DOE's responses are provided in the following section. Comments in each letter are identified, and the corresponding responses follow the letter.

----- Forwarded by NEPA/WSRC/Srs on 04/18/01 12:56 PM -----

**bill lawless <lawlessw@mail.paine.edu>**

04/17/01 06:23 PM

Please respond to lawlessw

To: nepa@mailhub.srs.gov

cc:

Subject: comments on the salt processing alternatives draft seis

andrew grainger, my comments on the subject dseis follow; if you should have any questions regarding them, please feel free to contact me by email or at 706-821-8340; thanks, bill lawless

1. the acronyms, abbreviations, scientific notation examples, and metric conversion tables at the front of the summary are excellent, and should be duplicated in the full dseis; L1-1

2. p. s1, para 6: much greater quantities of benzene were produced than "anticipated" should be changed to something more explanatory like: anticipated based on calculations and preliminary small laboratory experiments; L1-2

3. p. s1, para 6, last line: the statement regarding processing of hlw sludge should be buttressed and clarified for the public; i suggest something like: sludge processing has worked well and as anticipated and has led to the production of x number of canisters as of x date (use the most recent data); also at this point it would help to tell the public how this compares with other similar facilities such as west valley's totals and hanford's totals todate (about 300 and 0 respectively); L1-3

5/11/2001

**Comment L1**, Page 1 of 2

4. p. s4 and p. s13: it's confusing to split the columns differently from the rest of the text as done on these 2 pages; i recommend that columns be consistent throughout; L1-4

5. p. s5: in the event that the beginning of salt processing deadline date of 2010 is not met, it would help the public/decision makers to have an estimate of the consequences for the range of additional canisters that may be needed, the additional costs, and the additional number of years of vitrification that may be required; as is, the public and decision makers may not have a clear idea of the financial and other risks to the public for delaying the decision; L1-5

6. p. s6: if new tanks may be required by 2010, please specifiy the date for when a decision to construct them must be made, and for at how much of an estimated cost and for how many new tanks; as in item 5 above, the seis/summary must be clear about the costs to the public for not making a timely decision; L1-6

7. p. 26, the parenthetical date of 2023 is confusing; my suggestion on how to state it better: i.e., 100 years after 2023; L1-7

8. p. s5, box, please add: two tanks (tank 20 and tank 17) were formally closed by srs under a plan approved by dhec on dates x and x, respectively; L1-8

9. p. s9, add a section that reviews the status of the evaporator system at f and h areas and its impact on the tank space and the decision to initiate salt processing; L1-9

10. p. s11, last sentence in the "no action" section, i would recommend that the word "speculative" be changed to "unlikely"; L1-10

11. p. s16, what would happen to the benzene (and other wastes in the other alternatives) should be stated briefly in this section; i.e., the bezene would be treated on site, sent to a commercial facillity, or a decision about treatment would be made by x date; also add how likely and how easily would treatment be under all alternatives; L1-11

12. p. s30, the no action alternative should consider the possibility of an intank explosion from h-gas, and its consequences; L1-12

13. both the summary and full dseis should collect the estimated costs for each alternative and locate them in a table early on in the text; L1-13

14. both the summary and full dseis should include a reveiw of the maturity of the technologies under consideration (where employed by other site/industry/country, etc.); L1-14

15. full dseis, p. 341, graphic for srs = 0.18 mrem is not clear; i recommend that this be improved by putting the terms "srs 0.18 mrem" inside of a funnel that opens from a wedge of two lines inside of the pie so that it not be as confusing as it is; L1-15

5/11/2001

**Comment L1**, Page 2 of 2

**Response to Comment Letter L1:**

L1-1 The acronym, abbreviations, and scientific notation will be included in the final SEIS and the Summary

L1-2 DOE revised the statement as suggested in the comment.

L1-3 Although sludge-only processing is not in the scope of the salt processing alternatives DOE has indicated the number of canisters produced at SRS through May 2001 (about 1,100). However, DOE believes that the topic should be addressed briefly in the background sections of the SEIS. Comparisons with other DOE vitrification operations are not meaningful because of differences among them, for example, in completion of facilities and composition of waste.

L1-4 On both pages S-4 and S-13 of the draft SEIS the text box is the end of a section (e.g., Section S.1 on page S-4). DOE believes that the least confusing page layout is to start the next section (Section S.2) immediately below the text box.

L1-5 The HLW System Plan, Rev 11 (April 2000), indicates that a maximum of 150 fully loaded salt-only canisters can be produced per year. In the event that the salt processing date of 2010 is not met, then the potential exists that up to 150 additional canisters (salt-only) per year would have to be produced for every year lost in the schedule. The cost for additional canister production would be about $300 million per year. In the event that sludge processing were to be completed prior to the initiation of salt processing, it would take 13 years (at 150 canisters per year) to process all of the salt waste at an approximate cost of $4 billion in addition to the cost of construction and operation of the salt processing facility. (Note: These costs do not include Federal Repository costs for transportation and disposal). This discussion has been added to S.3, Section 1.2, and Section 2.7.1.

L1-6 DOE has estimated that a minimum of five years is required to permit and build new HLW storage tanks. Therefore, to meet the 2010 deadline, the permitting process would need to start by 2005. Because of the speculative nature concerning DOE's future course of activities under the No Action alternative, other specifics are unknown.

L1-7 The comment refers to the discussion of scoping comments which has been replaced in the final SEIS with a discussion of comments on the draft SEIS.

L1-8 DOE closed tanks 17 and 20 in 1996 and 1997, respectively. DOE believes this information is peripheral to the SEIS and has not changed the text.

L1-9 The three evaporator systems currently available have sufficient capacity to handle the expected demands of the HLW system once the process and equipment issues associated with the 2H and 3H Evaporator systems are resolved. The three evaporators operating at planned capacity will provide margin to accommodate future system upsets and allow the option to shutdown the 2F Evaporator system at some point in the future.

L1-10 DOE believes that "speculative" is a more accurate modifier for DOE's future course of action.

**Response to Comment Letter L1 (continued):**

L1-11 Currently, incineration is considered the best available treatment technology for benzene and other organic liquid wastes. DOE expects that these wastes would be disposed of by incineration. However, DOE has not yet determined whether the Consolidated Incineration Facility, a portable vendor-operated facility, or a suitable offsite facility would be used for incineration of these wastes. DOE previously analyzed the impacts of incineration and various alternatives to incineration in the *Final Supplemental Environmental Impact Statement, Defense Waste Processing Facility* (DOE/EIS-0082-S, November 1994). The results of this analysis show that the impacts from the various alternatives to incineration are bounded by the impacts of incineration. The actual treatment facility would be determined during design and construction of the salt processing facility.

L1-12 For the short term under all alternatives, the HLW tanks would be subject to the same potential accident risks as exist for current operations. These are evaluated in approved safety documentation and previous EISs as cited in Section 4.1.13. These impacts would persist over a longer period of time under the No Action alternative. Although DOE has not analyzed hydrogen explosion accidents over the long term, the generation of hydrogen decreases with time and accordingly the probability of a hydrogen explosion accident would also decrease over time.

L1-13 The revised Section 2.8.3, Cost, incorporates the latest approximate range of costs through construction for each of the SEIS alternatives. DOE does not consider the cost estimates at this time to be reliable enough to be a significant discriminating factor for decision making.

L1-14 The technical maturity of the salt processing alternatives is among the topics discussed in detail in technical reports cited in Sections 2.6 and 2.8. Because technical maturity is not an important consideration for assessment of environmental impacts, DOE did not repeat this information in the SEIS.

L1-15 The revised Figure 3-13 addresses the comment in a footnote.

STATE OF SOUTH CAROLINA
# State Budget and Control Board
OFFICE OF STATE BUDGET



1122 LADY STREET, 12TH FLOOR
COLUMBIA, SOUTH CAROLINA 29201
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LES BOLES
DIRECTOR

## ACKNOWLEDGEMENT

April 30, 2001

Mr. Andrew R. Grainger
NEPA Compliance Officer
Savannah River Operations Office
Building 742A, Room 183
Aiken, South Carolina 29802

Project Name: Savannah River Site Salt Processing Alternatives Draft Supplemental Environmental Impact Statement March 2001 DOE/EIS-0082-S2D

State Application Identifier:EIS-010402-002
Suspense Date: 6/ 7/2001

Dear Mr. Grainger:

Receipt of the above referenced project is acknowledged. The Grant Services Unit, Office of State Budget, has initiated an intergovernmental review of this project. You will be notified of the results of this review by the suspense date indicated above. South Carolina state agencies are reminded that if additional budget authorization is needed for this project, three copies of the completed GCR-1 form and two copies of the project proposal must be submitted to this office. This action should be initiated immediately, if required. Please include the State Application Identifier in any correspondence with our office regarding this project. If you have any questions please contact me at 734-0485.

Sincerely,

Angela F. Stoner
Fiscal Manager, Grant Services

Fax (803) 734-0645

**Comment L2**, Page 1 of 1

**Response to Comment Letter L2:**

No response required.